



HCB22-44-BS35-ND-R

Luminaire Description: White rectangular metal housing with clear plastic lens
Lamp: 96 White LEDs
Mounting: VBD
Ballast/Driver: Signify North America / XI040C110V054BST1

Luminaire



Luminaire Characteristics

Luminous Length: 44.25 in.
Luminous Width: 4.000 in.
Luminous Height: 0.50 in.

Summary of Results

Integrating Sphere

Luminous Flux: 2167 Lumens
Efficacy: 71.77 lm/w
CCT: 3321 K
CRI (Ra): 84.0

Distribution

Total Luminaire Output: 2162 Lumens
Luminaire Efficacy: 71.5 lm/w
Maximum Candela: 1203 Candela

Electrical Data at 120 VAC

Test Temperature: 25.2 °C
Voltage: 120.1 VAC
Current: 0.2533 A
Power: 30.19 W
Power Factor: 0.993
Frequency: 60 Hz
Current THD: 7.86 %



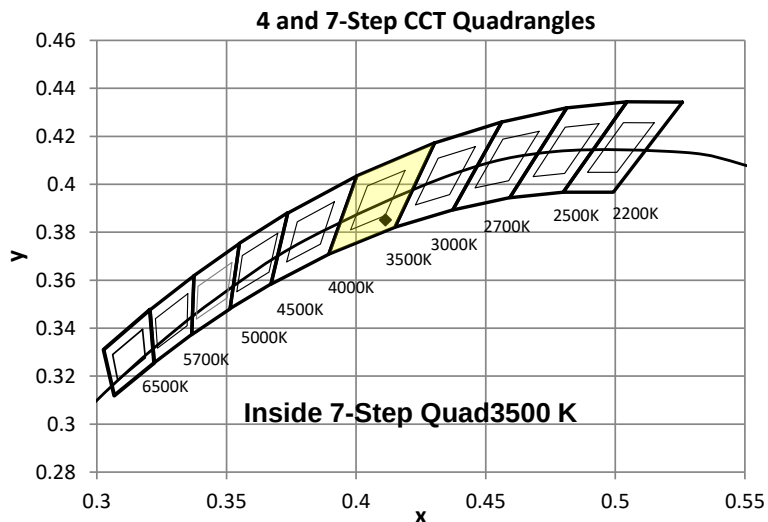
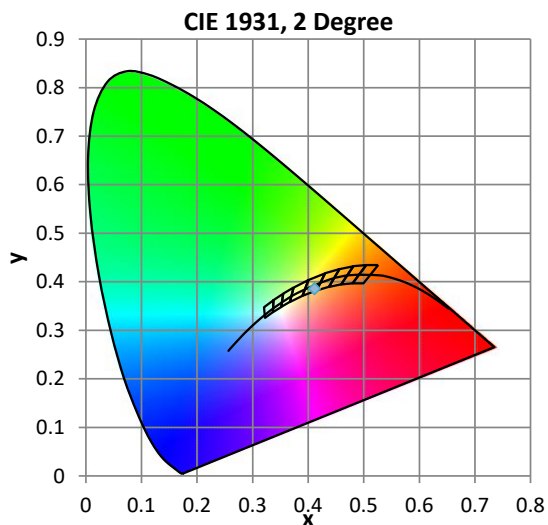
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.2 °C	120.1 VAC	0.2533 A	30.19 W	0.993	60 Hz	7.86 %

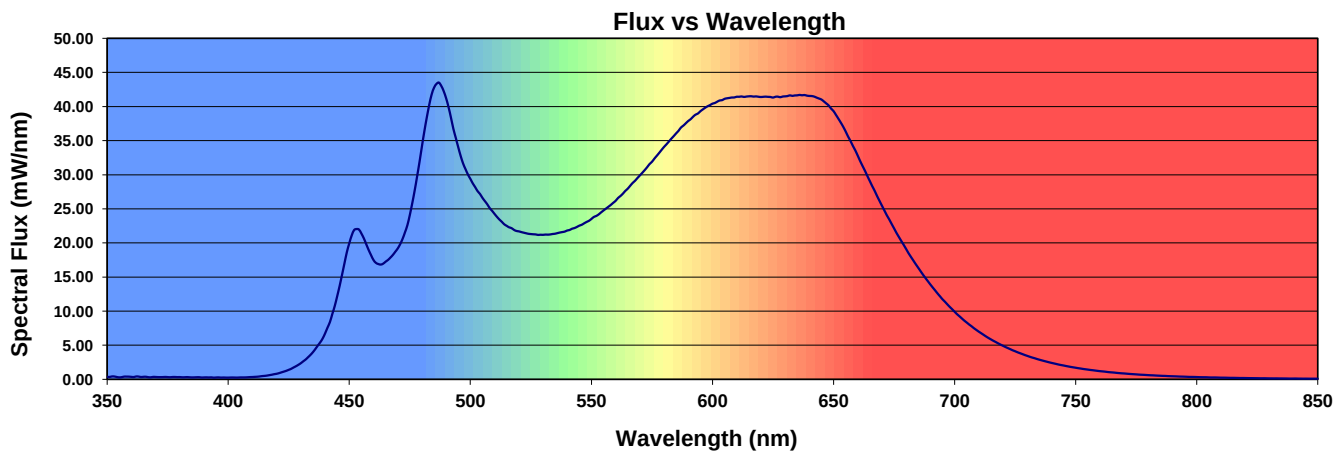
Summary of Results

Total Output:	2167 Lumens	Chromaticity (x):	0.4113
Efficacy:	71.8 lm/w	Chromaticity (y):	0.3852
CCT:	3321 K	Chromaticity (u'):	0.2420
CRI (Ra):	84.0	Chromaticity (v'):	0.5099
CRI (R9):	90.4	TM-30 Rf:	81
Peak Wavelength:	487 nm	TM-30 Rg:	91
Dominant Wavelength:	583 nm	TM-30 Rcs,h1:	-2%
S/P Ratio:	1.87	Duv:	-0.0037
M/P Ratio:	0.82	WELL Building Standard v2	



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
84.0	92.5	84.6	75.9	88.3	87.8	74.7	82.2	86.0	90.4	62.9	88.7	57.7	89.0	86.5	95.3





Distribution - Goniophotometer

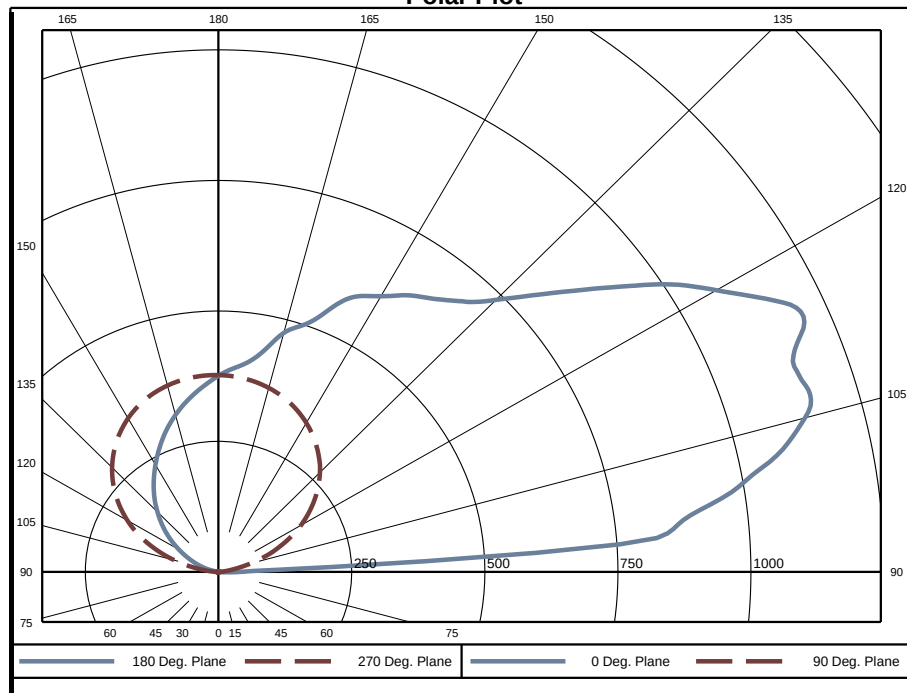
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.2 °C	120.0 VAC	0.2536 A	30.23 W	0.993	60 Hz	7.75 %

Summary of Results

Total Lumen Output:	2162 Lumens
Luminaire Efficacy:	71.5 lm/w
Maximum Candela:	1203 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0	0.0%	60-65	0.7	0.0%	120-125	176.1	8.1%
5-10	0	0.0%	65-70	0.5	0.0%	125-130	161.9	7.5%
10-15	0	0.0%	70-75	1.2	0.1%	130-135	148.1	6.9%
15-20	0	0.0%	75-80	1.1	0.1%	135-140	135.5	6.3%
20-25	0	0.0%	80-85	1.2	0.1%	140-145	123.8	5.7%
25-30	0	0.0%	85-90	5.2	0.2%	145-150	110.7	5.1%
30-35	0	0.0%	90-95	68.4	3.2%	150-155	95.9	4.4%
35-40	0	0.0%	95-100	149.7	6.9%	155-160	79.8	3.7%
40-45	0.0	0.0%	100-105	179.8	8.3%	160-165	62.3	2.9%
45-50	0.0	0.0%	105-110	193.8	9.0%	165-170	44.6	2.1%
50-55	0.1	0.0%	110-115	197.7	9.1%	170-175	26.8	1.2%
55-60	0.3	0.0%	115-120	188.2	8.7%	175-180	9.0	0.4%

Zone	Lumens	% of Luminaire
0-40	0	0.0%
0-60	0	0.0%
0-90	10	0.5%
90-180	2152	99.5%



Candela Tabulation
Horizontal Angle (Degrees)

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
55	0	3	0	0	0	0	0	0	0	0	0	0	1	1	1	0
60	0	0	2	1	0	0	0	0	0	0	0	1	1	2	7	0
65	0	0	12	1	1	0	0	0	0	0	0	1	2	2	10	0
70	0	0	1	3	1	0	0	0	0	0	0	1	2	16	2	0
75	0	0	1	28	1	0	0	0	0	0	0	1	2	13	2	0
80	0	0	2	5	2	0	0	0	0	0	0	1	3	5	2	1
85	10	8	3	3	4	0	0	0	0	0	0	1	3	4	8	11
90	43	35	23	9	4	1	2	3	2	2	2	2	3	121	68	60
95	847	738	492	186	9	3	1	0	0	0	1	9	18	248	552	776
100	1005	905	654	271	28	14	8	3	2	5	16	22	46	300	707	953
105	1140	1043	733	322	63	30	25	22	23	27	33	42	85	314	755	1060
110	1150	1068	804	327	104	54	43	41	42	46	52	70	124	329	767	1073
115	1197	1107	704	347	142	84	66	61	62	67	77	100	163	346	695	1075
120	1080	966	669	364	179	116	92	85	86	91	104	132	198	359	671	928
125	956	869	638	382	212	148	120	110	111	117	131	163	229	367	664	834
130	834	754	616	377	243	179	149	136	137	143	159	193	257	356	598	760
135	737	679	563	402	270	209	177	163	162	168	186	222	282	362	545	715
140	679	647	560	404	293	236	204	189	187	194	211	248	305	377	508	647
145	646	610	528	410	313	261	230	213	212	219	237	272	323	377	506	627
150	610	587	494	418	330	285	256	239	237	244	262	294	340	383	489	569
155	578	572	477	408	344	306	280	264	262	269	286	314	352	389	480	508
160	511	518	435	386	356	325	303	289	288	294	308	331	362	394	471	494
165	474	436	404	386	365	341	324	313	312	317	328	346	369	393	454	473
170	420	408	397	385	371	355	343	335	334	338	346	359	374	388	411	421
175	394	393	388	382	375	366	360	355	355	357	361	368	377	383	390	393
180	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376



Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as percent of total lumen output delivered to the task surface **																	
0	95	95	95	95	82	82	82	82	56	56	56	32	32	32	11	11	11	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	9	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	8	7	0
3	72	63	56	51	61	54	49	44	37	34	31	22	20	18	7	6	6	0
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	6	5	4	0
6	55	44	36	31	47	38	31	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

Up Light Beam and Field Information	
CIE Type:	Indirect
Center Beam Intensity:	376 Candela
Central Cone Intensity:	375 Candela
Beam Flux:	2152.0 Lumens
Beam Angle (0-180):	127.5 Degrees
Beam Angle (90-270):	120.2 Degrees
Field Angle (0-180):	161.7 Degrees
Field Angle (90-270):	159.6 Degrees

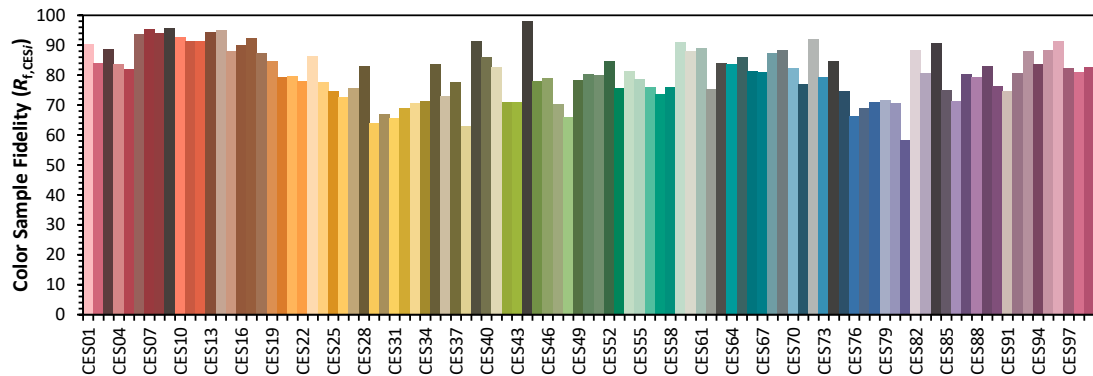
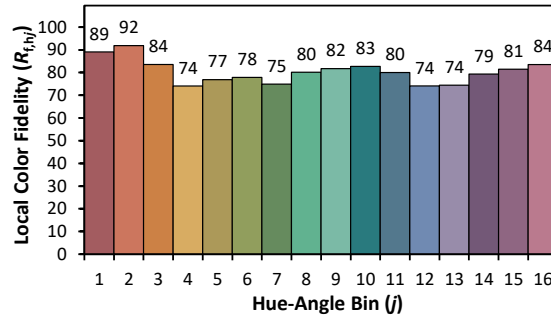
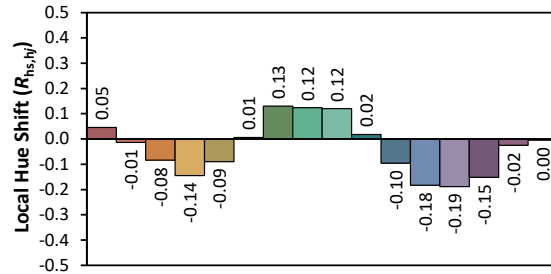
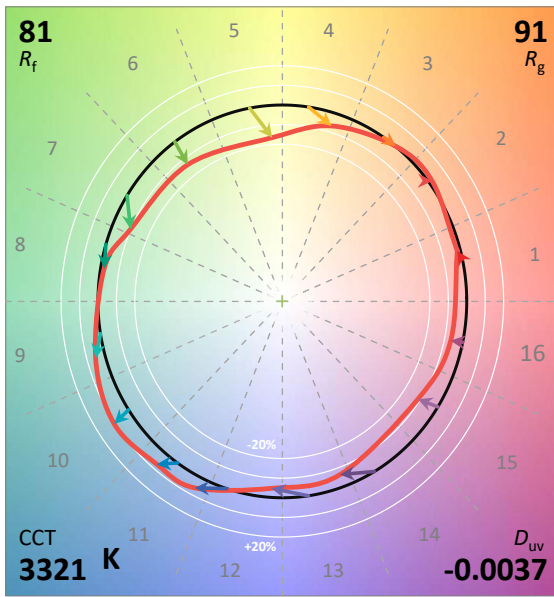
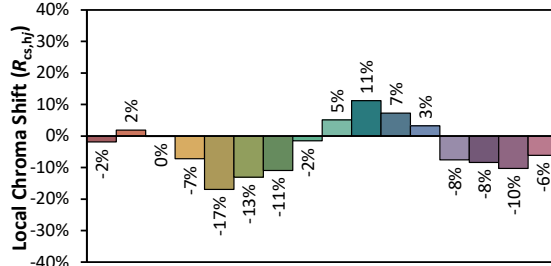
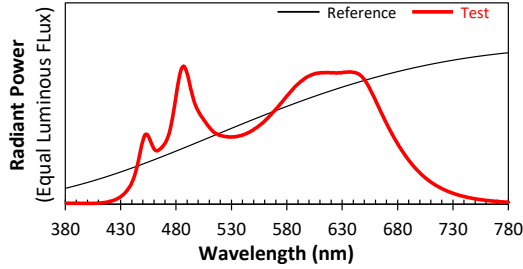
ANSI/IES TM-30-18 Color Rendition Report

Date: 2022-03-28

Manufacturer: BARTCO LIGHTING INC

Model:

HCB22-44-BS35-ND-R



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.4113
y 0.3852
u' 0.2420
v' 0.5099

CIE 13.3-1995
(CRI)
R_a 84
R₉ 90

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.